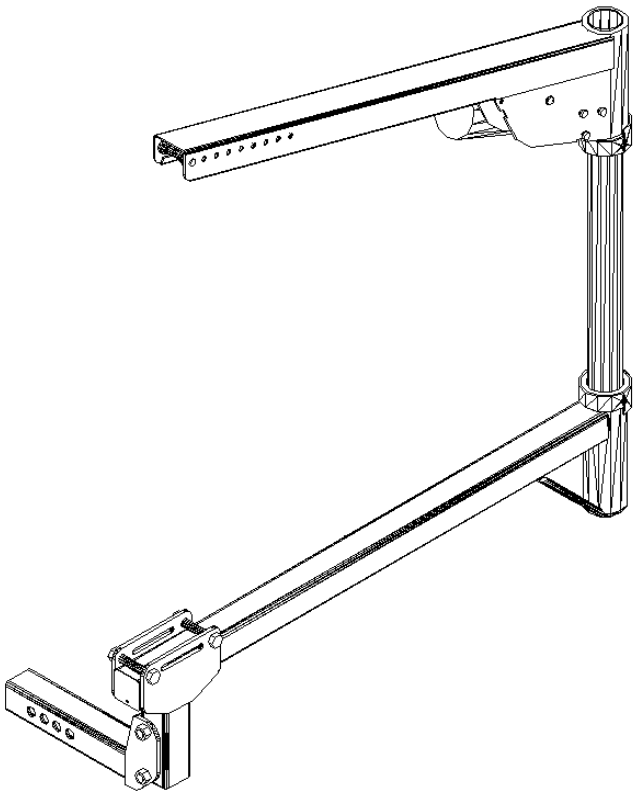
Quick Install Lift
AL065
Installation Guide & Owners Manual



Congratulations on your new lift purchase. The Quick Install Lift line is one of the easiest and most trouble free ways to transport your scooter or power chair. This manual is written to be used both as an installation guide as well as an operation guide for the end user. Please read the manual thoroughly BEFORE attempting any installation, adjustment or use of the lift.

Both installers and operators should familiarize themselves with this entire manual.

If you have any questions or comments concerning the installation or operation of your scooter lift, please contact your local distributor for additional technical information. Only authorized dealers should install this lift.

Caution: *Some scooters and power chairs may be unsuitable for transport in or on a motor vehicle. Please contact the manufacturer of your mobility device to determine its transportability*.

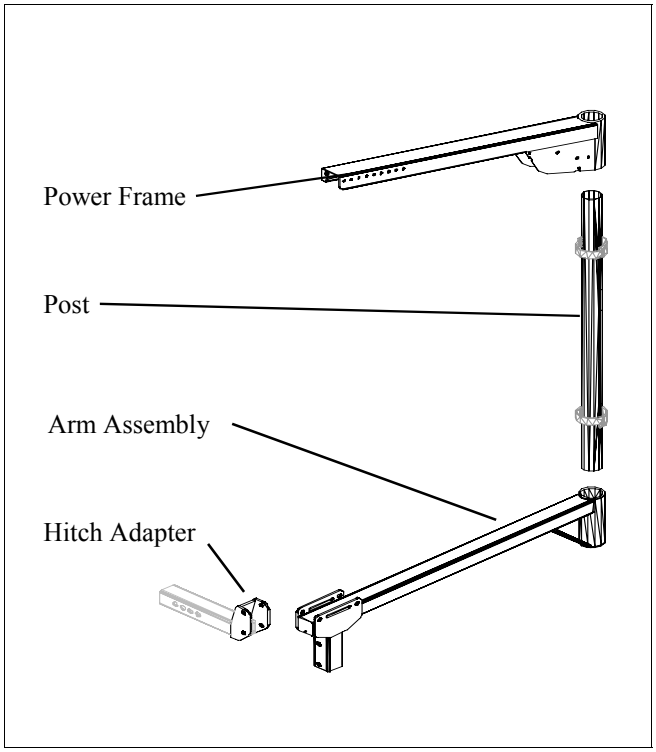
Unpacking the Lift

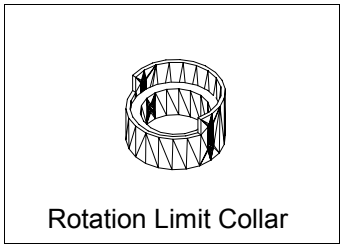
Check the contents of the box against the package check list to be sure that all parts are included with the lift that are required for proper installation. If any parts are missing or if any damage is noted, immediately contact the distributor from which you purchased your lift. DO NOT attempt to install or use the lift with any missing or damaged parts.

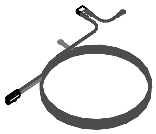
Box Contents:
Power Frame
Post with 2 Rotation Limit Collars
Arm Assembly
Hardware Pack
Hitch Adapter

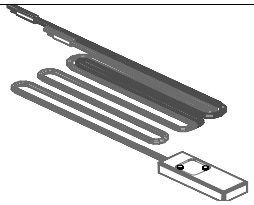
Hardware Pack Contents:

1	Owners Manual
1	1/2-13 x 3-1/2 Bolt
1	1/2-13 Lock Nut
1	Vehicle Wiring Harness
1	Hand Control
1	Al065 Wiring Harness
4	Black Adhesive Clips
1	Pinch Bolt Tube

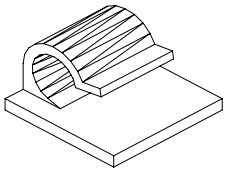


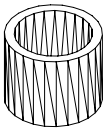

Rotation Limit Collar


Vehicle Wiring Harness


Hand Control

AL065 Wiring Harness


Black Adhesive Clip


Pinch Bolt Tube

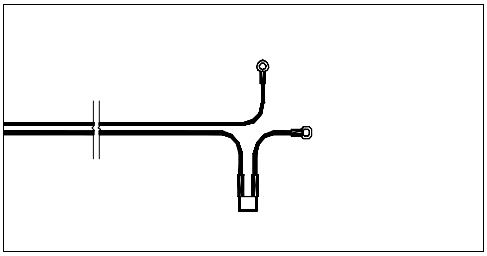
- **Applications** Car Trunk
  Rear Cargo Area—for most vans and SUV's.
  Tailgate applications for SUV's, Station Wagons and Trucks

Installing the Vehicle Wiring Harness

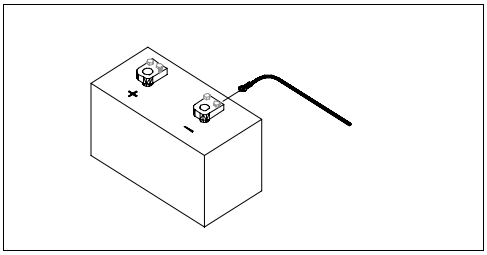
Important Note: IMPROPER WIRING IS THE #1 CAUSE OF PROBLEMS IN THE OPERATION OF A VEHICLE LIFT. <u>FOLLOW THE WIRING INSTRUCTIONS CAREFULLY</u>

Located in the hardware package is the vehicle wiring harness. The harness is manufactured to, and complies with the SAE J1128 requirements. The wire harness is approximately 23 ft. long and will accommodate most vehicles.

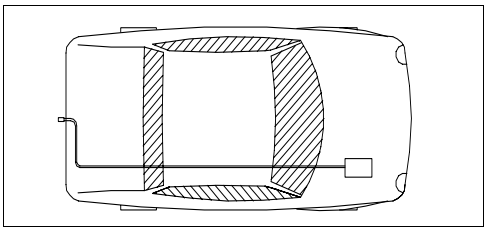
1. Unwind the harness and lay it flat. One end of the harness has a black plug. This is the lift end of the harness and goes to the back of the vehicle.



2. Begin routing the wiring harness at the vehicle battery. Attach the black wire to the negative terminal on the battery. **Do not attach the red wire yet.**

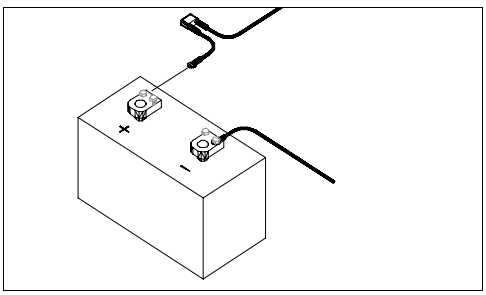


3. Run the wiring harness under or when possible through the vehicle, back to the trailer hitch. Always locate the wiring harness where it can not be snagged by road debris and away from the vehicles gas tank.



4. If the harness is too long for the vehicle, coil the excess wire and secure it to the vehicle frame with the supplied tie wraps. **Do not cut or shorten the harness.** Secure the plug about even with the end of the hitch receiver tube.

5. Attach the red wire to the positive terminal on the battery.



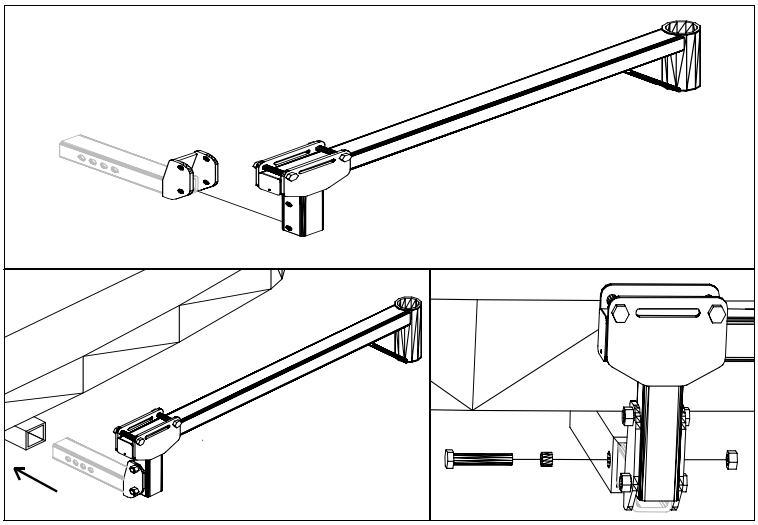
Important Reminder: Never attempt to attach the wire harness to a secondary power source. The lift requires direct connection to the battery.

Caution: ***When the installation requires the wiring harness be run on the underside of a vehicle, route the harness away from the exhaust system, brake lines, fuel lines, gas tank, pinch points, and sharp edges. Locate the wiring harness where it can not be snagged by road debris.***

Manufacturer's Recommendation: Schedule a routine maintenance visit with the end user. Harmar recommends the lift be greased in the applicable areas, and the wire harness connections be checked for corrosion, and/or decay, as such conditions are normal due to environmental changes.

Installing the AL065

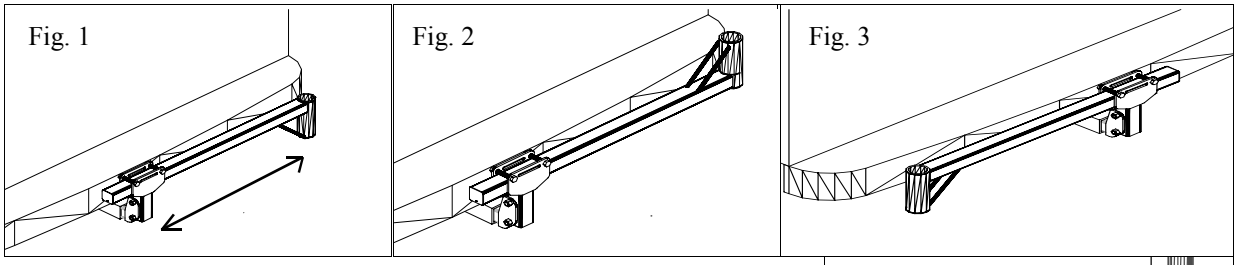
Caution: Carefully read and follow each of the following steps each time you assemble the lift. Failure to do so can result in damage to the lift, vehicle, chair, or injury to the installer/ operator.



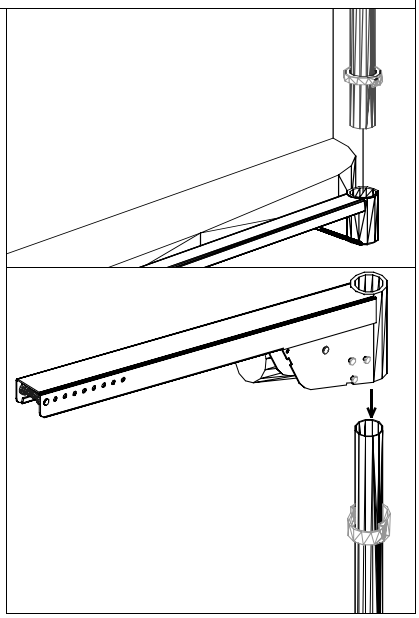
1. Unpack the AL065's shipping box and identify the Arm Assembly with hitch adapter bolted to it hitch.

2. Insert the Hitch Adapter into the vehicles trailer hitch. Bolt the Hitch Adapter to the hitch using the 1/2-13 x 3-1/2 bolt, nut and pinch bolt tube. Be sure to tighten the bolts sufficiently.

3. The Arm Assembly may be adjusted sideways (Fig. 1), inverted (Fig. 2), or switched to a driver side application (Fig. 3).



4. Insert the post into the hole at the end of the Arm Assembly. The post does not have a specified top or bottom so either end may point up. The post is equipped with two rotation limit collars. These collars prevent the lift from rotating too far. Rotate the post so that the lower collar drops down around the arm assembly.

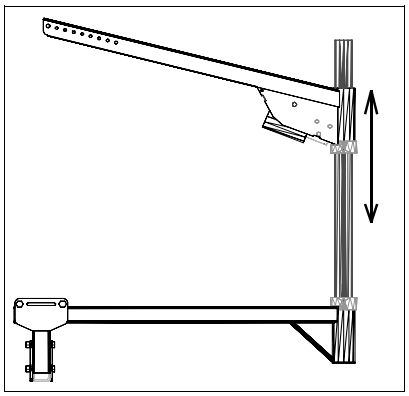


Caution: Pinch points exist at both rotation limit collars. Always stay clear of these areas.

5. Place the power frame on the top of the post. Rotate the frame so that it drops down into the rotation limit collar at the top of the post.

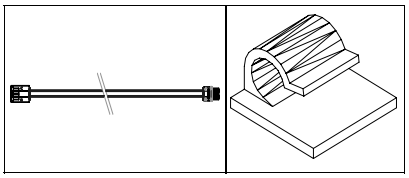
6. The arm assembly, rotation limit collars, and power frame have a strip of red material on them. To ensure that the lift is assembled correctly, rotate the power frame and vertical post until all of the red stripes line up vertically.

7. The Rotation Limit Collars are attached to the Post with 1/4-20 bolts. If you need to adjust the height of the power frame, you may change the vertical position of the rotation limit collars along the post. To do so the post is equipped with a series of holes to accept the bolt from the rotation limit collars. The close together holes are for fine adjustments and the others are for larger adjustments.



Caution: Both rotation limit collars must be bolted to the post for the lift to operate. Do not add any additional holes to the post or modify any part of the lift.

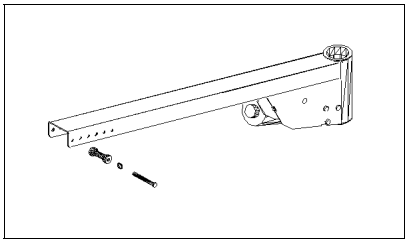
8. Plug the AL065 Wiring Harness into the black plug on the Vehicle Wiring Harness. Route the Al065 Wiring Harness along the bottom of the Arm Assembly to the base of the Post. Secure the wiring harness to the Arm Assembly using the adhesive black plastic clips in the hardware pack. Position the female end of the Al065 Wiring Harness where it can be easily accessed for attaching the Hand Control. The user will need to attach and remove the Hand Control each time they use the lift.



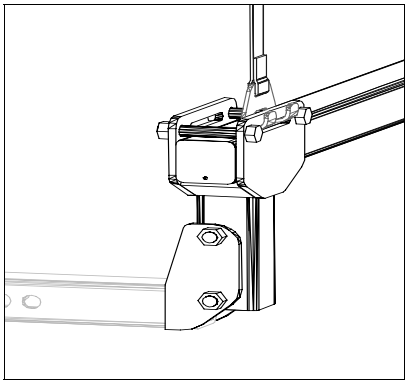
AL065 Wiring Harness Black Adhesive Clip

Caution: Attach the female end of the Wiring Harness so that it points down and will not collect water.

Caution: Read the operation instructions before performing Step 9.



9. Plug the Hand Control into the AL065 Wiring Harness and into the motor on the Power Frame. You are now ready to test lift a chair. Lower the lift's hook down and attach it the docking device on your chair. (See your docking device's instructions for correct installation and operation.) Raise the chair and carefully swing it into the vehicles rear door or trunk. If the chair will not fit through the opening carefully swing it back out and return it to the ground. You may need to adjust the location of the Arm Assembly (Figs. 1, 2, 3) or the location of the strap roller.



10. To move the Strap Roller, remove the Split Ring (like on a key chain) from the Clevis Pin. Pull out the Clevis Pin and Strap Roller and replace it in the desired hole location.

11. The lift may be left assembled during transport. To do so you will need to secure the Power Frame so that it does not swing while the vehicle is in motion. Lower the strap hook and attach it to the oval shaped slot in the Arm Assembly. Tighten the strap until it is snug but not overly tight. Push on the power frame and verify that it can not hit the vehicle.

Hitch Sincher

The purpose of the Hitch Sincher is to prevent vertical play in the trailer hitch. Attach the two 5/8" diameter steel rods together with the supplied 1/4-20 x 4" bolts and 1/4" nuts (Figure 1). Slip this assembly over the trailer hitch and attach it as shown in Figure 2. Tighten the bolts and nut to remove any play in the hitch (Figure 3).

Figure 1

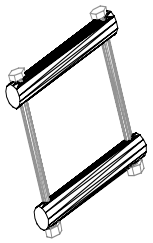


Figure 2

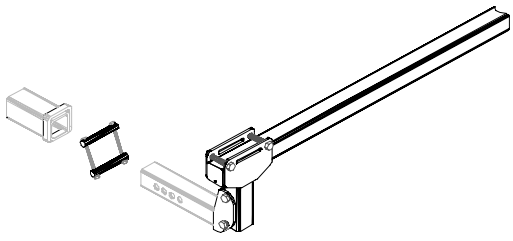
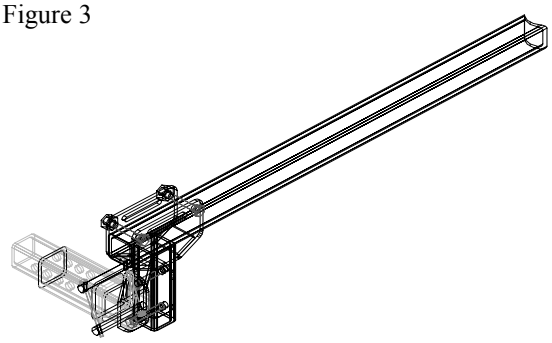


Figure 3



Operation Instructions

- Inspect the Lifting Strap prior to each use. Contact your distributor if it shows signs of wear or fraying.
- Do not operate this lift until you dealer has satisfactorily instructed you in the proper operation of this lift.
- Always make sure the vehicle's parking brake is firmly set before operation.
- Keep hands and feet from under the scooter or power chair as it is being lifted.
- Take care not to hold one of the buttons on the Hand Controller until the Lifting Strap switches direction. The UP button should always pull the strap up and vice versa. If your buttons cause opposite movement, contact your distributor.

Loading your Scooter or Power Chair —Trunk Applications

***Note**: Due to the wide variety of scooters, power chairs and vehicles, your dealer may offer a different method for Loading and Unloading your scooter. Please follow the guidelines they have offered.*

- To assemble your lift, begin by inserting the Post into the Arm assembly. Next, slide the Power Frame onto the top of the Post. Line up the Red stripe on the Power Frame, Rotation Limit Collars, and Arm assembly.
- Plug the Hand Control into the Power Frame and into the AL 065 Harness.
- Swing the Power Frame toward the scooter.
- Maneuver the scooter parallel to the rear bumper and two inches behind the vehicle. Depending on the vehicle, it may be necessary to: remove the seat; fold down or remove the handle bar; remove accessories such as brackets, baskets, crutch holders, etc.
- With the docking device positioned directly under the Strap Hook, lower the Lifting Strap using the DOWN button on the Hand Control until the Strap Hook can be engaged into the docking device installed on the scooter or chair. Hook the docking device on the scooter or chair with the Strap Hook and remove any play in the strap by pushing the UP button on the Hand Control until tension is felt.

Caution: Ensure that the Lifting Strap is secure and taught and that it points straight down. Failure to do so could result in the scooter or chair swinging toward the operator of the vehicle.

- Raise the scooter or chair using the UP button until the scooter or chair is just above the trunk lip.

Caution: Stop lifting before the Strap Hook contacts the Strap Roller mounted on the Power Frame. Contact will result in damage to the lift. A properly adjusted and operated lift will avoid this.

- Swing the scooter or chair into the vehicle, ensuring that the scooter or chair does not contact the vehicle.
- With the scooter or chair positioned above its stowed position, lower the lift using the DOWN button on the Hand Controller. Continue lowing the Strap Hook slightly beyond the scooter touching the floor to allow removal of the Strap Hook from the Docking Device on the scooter or chair.
- To disassemble the lift, first raise the strap until the freed Strap Hook is about an inch away from the Power Frame. Unplug the Hand Control harness from both the Vehicle Harness and the Power Frame.
- Pull the Power Frame off the Post and lay it on the floor of the trunk. Then, pull the Post out of the Arm Assembly and set it down with the Power Frame.

- If preparations needed to be made to secure the scooter or chair for transport, such as parking brakes or wheel chocks, do these now. Dealers should instruct operators on how, if necessary, to secure the scooter or chair for transport. Close the trunk and you are ready to go.

Unloading Your Scooter or Power Chair—Trunk Applications

- Undo any preparations made to secure the scooter or power chair for transport.

- To assemble your lift, begin by inserting the Post into the Arm assembly. Next, slide the Power Frame onto the top of the Post. Line up the Red stripe on the Power Frame, Rotation Limit Collars, and Arm assembly.

- Plug in the Hand Control.

- By pressing the DOWN button on the Hand Control harness, run the Strap Hook down until it is slightly lower than the docking device on the scooter.

- Attach the Strap Hook to the docking device on the scooter or chair and remove any play in the strap by pressing the UP button on the Hand Control until tension is felt.

Caution: Ensure that the Lifting Strap is secure and taught and that it points straight down. Failure to do so could result in the scooter or chair swinging toward the vehicle or operator.

- Raise the scooter using the UP button until the scooter or chair is just above the trunk lip.

Caution: Stop lifting before the Strap Hook contacts the Strap Roller mounted on the Power Frame. Contact will result in damage to the lift. A properly adjusted and operated lift will avoid this.

- Swing the scooter or chair out of the vehicle, carefully ensuring that the scooter does not contact the vehicle.

- With the scooter or chair positioned away from the vehicle, lower the lift using the DOWN button. Continue lowering the lift slightly beyond the scooter or chair touching the ground to allow removal of the Strap Hook from the docking device on the scooter.

- To disassemble the lift, first raise the Lifting Strap until the freed Strap Hook is about an inch away from the Power Frame. Unplug the Hand Control harness from both the Vehicle Harness and the Power Frame.

- Pull the Power Frame off of the Post and lay it on the floor of the trunk. Then pull the Post out of the Arm assembly and set it down with the Power Frame.

SAFETY:

- ***Caution:*** Do not operate this lift until your dealer has satisfactorily instructed you in the proper operation of the lift.

- Your Harmar Lift has been engineered and designed for years of trouble free use. Although, with everyday use, some parts may become loose or worn. **IMPORTANT!** Check regularly for any worn, loose or damaged parts of your lift. **If anything is observed, DO NOT USE THE LIFT!** Contact your dealer or installer of the lift for repairs to be made**. Failure to act may cause severe injury!**

- Your Harmar Lift should only be used for the loading and unloading of scooters and power wheelchairs for which it is designed. DO NOT add to or modify any part of the lift system without first contacting the manufacturer of the lift. Any modifications may void any warranties as well as effect the structural integrity of the lift.

- **ALWAYS CHECK THE LIFTING STRAP BEFORE EACH USE FOR DAMAGE OR WEAR.**

- Always make sure the vehicle's parking brake is firmly set before operating the lift.

- ***Caution:*** Insure that the Lifting Strap is secure and taught and that it points straight down before lifting of the scooter or power chair. Failure to do so could result in the scooter or chair swinging toward the operator of the vehicle.

- ***Caution:*** When using the lift, keep your hands and feet from under the scooter or power chair as it is being loaded or unloaded.

- ***Caution:*** Stop lifting before the Strap Hook contacts the Strap Roller mounted on the Lifting Arm. Contact will result in damage to the lift. A properly adjusted and operated lift will avoid this.

- ***Caution:*** Insure that the scooter or chair is firmly sitting on the floor of the vehicle and not suspended by the lift. If the scooter or power chair is not firmly on the floor of the vehicle, it may move during transportation and cause damage to the lift, scooter or power chair, vehicle, or passengers.

MAINTENANCE:

The Harmar Lift has been designed to be as trouble free as possible for the owner. But, as with any mechanical device, regular care should be given while owning and using this device.

Maintenance is no exception.

- We recommend that dealers should schedule a preventative maintenance inspection at least once a year on motors, lift frame, wiring harness and all moving parts of the lift.

- Check for paint chips and touch up any bare metal with a good gloss black enamel or lacquer to inhibit rust. This may be necessary more frequently when subjected to salt air or road salt.

- Always check the lifting strap before each use. If any wear or fraying is noticed DO NOT USE THE LIFT! Contact the installer or dealer for repair. Failure to act may cause damage to the vehicle or severe injury!

- Hand control units should not be exposed to the weather. If the lift is mounted in the bed of a truck, remove the hand control between each use. Exposure to the elements may cause the unit to fail.

WARRANTY:

This lift is covered by a three year factory warranty on materials and workmanship. Contact your local dealer for more information or go to www.harmar.com for complete details.

TROUBLESHOOTING:

PROBLEM: The lift will not operate or operates slowly.

***Possible Causes**:*

Bad Connection—Verify the vehicle wiring harness is tightly attached to the battery and that there is no build up on the terminals.
Battery—Check to see if the battery needs to be replaced or if the terminals are corroded. Clean the terminals if any corrosion is present. 12 volts should be present at the lifting or rotational motors from the vehicles battery. This can be tested with a voltage meter.

PROBLEM: Intermittent power to the lift. The lift will operate for a short period of time and quit. At a later time it will start working again.

Possible Causes:

Circuit Breaker—Although the breaker resets itself automatically, it may be malfunctioning and need to be replaced. Check for power at the lift with a test lamp.

Bad Connection—Verify the vehicle wiring harness is tightly attached to the battery and that there is no build up on the terminals.

Hand Control—Test by bypassing the hand control. Do this for only a second or two. The lift, vehicle, scooter or chair may be damaged if continuous power is left supplied to the unit.

PROBLEM: Lifting arm is slow to swing in / out. (AL400 only)

Possible Causes:

Dirty Bushings—Clean and apply new grease to the white plastic bushing that is located in the Base.

Bad Connection—Verify the vehicle wiring harness is tightly attached to the battery and that there is no build up on the terminals.

PROBLEM: The lifting strap operates in reverse.

Possible Causes:
The lifting strap was overextended. The lifting strap was lowered too far, causing the strap to wind around the spool backwards. Lower the strap until it unravels from the spool. Then, raise the strap in the proper direction.

PROBLEM: AL400 rotates in wrong direction when installed on the passenger side of the vehicle.

Possible Causes:
The lift is shipped from the factory to be mounted on the drivers side of the vehicle. To change the rotation for the passenger side remove the bolt located near the bottom of the post, rotate the motor 180 degrees and reinsert the bolt. Next, change the rotation of the motor located in the base by switching the wires on the motor to reverse the polarity.

PROBLEM: The scooter or chair tips to the front or back while it is being lifted.

Possible Causes:
The scooter or chair is being lifted off center. The docking device should center the lifting strap over the center of gravity which is generally around the center of the seat. Check to make sure the proper docking device is being used.